

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

CONTIGUITY LLC,

Plaintiff,

v.

HIKVISION USA, INC.,

Defendant.

Case No. 3:23-cv-00160

**DEFENDANT'S APPENDIX IN SUPPORT OF ITS MOTION TO DISMISS
PLAINTIFF'S SECOND AMENDED COMPLAINT FOR FAILURE TO STATE
A CLAIM UNDER FED. R. CIV. P. 12(b)(6)**

Exhibit	Document	Page No.
	Declaration of Keith B. Davis in Support of Defendant's Motion to Dismiss for Failure to State a Claim Under Rule 12(b)(6)	APPENDIX_003
Exhibit A	U.S. Patent No. 8,031,084 ("the '084 patent")	APPENDIX_006
Exhibit B	W.D. Texas Section 101 Order, Dkt. 27 in <i>Contiguity LLC, v. Conduent Business Services, LLC</i> , 6:23-cv-00038-XR, (W.D. Tex. May 12, 2023)	APPENDIX_018
Exhibit C	Chart comparing claims 1-4, 8, and 15 of U.S. Patent No. 8,031,084	APPENDIX_029
Exhibit D	Assignment History of the U.S. Patent No. 8,031,084	APPENDIX_031
Exhibit E	Applicant's Response to the First Office Action of U.S. Application No. 12/907,702 (March 7, 2011)	APPENDIX_034
Exhibit F	Applicant's Amendments to the Claims in Response to the First Office Action of U.S. Application No. 12/907,702 (March 7, 2011)	APPENDIX_040
Exhibit G	W.D. Texas 12(b)(6) Order, Dkt. 42 in <i>Contiguity LLC, v. Conduent Business Services, LLC</i> , 6:23-cv-00038-XR, (W.D. Tex. Jan. 22, 2024)	APPENDIX_046
Exhibit H	Dkt. 37, Order Granting Hikvision USA, Inc.'s Motion to Dismiss Contiguity's First Amended Complaint, <i>Contiguity LLC v. Hikvision USA, Inc.</i> , 3:23-cv-00160-N (N.D. Tex. Dec. 19, 2023)	APPENDIX_055

Dated: April 8, 2024

Respectfully submitted,

/s/ Keith B. Davis

Keith B. Davis

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on April 8, 2024, the foregoing document was served via electronic means upon the following counsel of record for Plaintiff who have appeared in this case:

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NAI-1539759676v1

**DECLARATION OF KEITH B.
DAVIS IN SUPPORT OF
DEFENDANT'S MOTION TO
DISMISS PLAINTIFF'S
SECOND AMENDED
COMPLAINT FOR FAILURE
TO STATE A CLAIM UNDER
RULE 12(b)(6)**

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION**

CONTIGUITY LLC,

Plaintiff,

v.

HIKVISION USA, INC.,

Defendant.

Case No. 3:23-cv-00160

Patent Case

JURY TRIAL DEMANDED

**DECLARATION OF KEITH B. DAVIS IN SUPPORT OF DEFENDANT'S MOTION TO
DISMISS PLAINTIFF'S SECOND AMENDED COMPLAINT FOR FAILURE TO
STATE A CLAIM UNDER RULE 12(b)(6)**

I, Keith B. Davis, declare as follows:

1. I am a partner of the law firm of Jones Day and counsel of record for Defendant Hikvision in the above-captioned action. I am a member in good standing of the State Bar of Texas. I make this declaration based on personal knowledge and, if called upon to do so, could testify competently thereto.

2. Attached hereto at Exhibit A is a true and correct printout of U.S. Patent No. 8,031,084, as provided with Plaintiff's First Amended Complaint. *See* Dkt. 18-1.

3. Attached hereto at Exhibit B is a true and correct printout of an Order from Judge Rodriguez in the matter captioned: *Contiguity LLC, v. Conduent Business Services, LLC*, 6:23-cv-00038-XR, (W.D. Tex. May 12, 2023) obtained from the United States District Court for the Western District of Texas electronic case file system (at: <https://ecf.txwd.uscourts.gov/doc1/181130216858>), last accessed April 2, 2024.

4. Attached hereto at Exhibit C is a chart comparing claims 1-4, 8, and 15 of U.S. Patent No. 8,031,084.

5. Attached hereto as Exhibit D is a true and correct printout of the assignment history for U.S. Patent No. 8,031,084, available from the United States Patent and Trademark Office (“USPTO”) (at: <https://patentcenter.uspto.gov/applications/12907702/assignments?application=>), last accessed on April 2, 2024.

6. Attached hereto as Exhibit E is a true and correct printout of Applicant’s Response to the First Office Action of U.S. Application No. 12/907,702 (March 7, 2011), available from the United States Patent and Trademark Office (“USPTO”) (at: <https://patentcenter.uspto.gov/applications/12907702/ifw/docs?application=>), last accessed on April 2, 2024.

7. Attached hereto as Exhibit F is a true and correct printout of Applicant’s Amendments to the Claims in Response to the First Office Action of U.S. Application No. 12/907,702 (March 7, 2011), available from the United States Patent and Trademark Office (“USPTO”) (at: <https://patentcenter.uspto.gov/applications/12907702/ifw/docs?application=>), last accessed on April 2, 2024.

8. Attached hereto as Exhibit G is a true and correct printout of an Order from Judge Rodriguez in the matter captioned: *Contiguity LLC, v. Conduent Business Services, LLC*, 6:23-cv-00038-XR, (W.D. Tex. January 22, 2024) obtained from the United States District Court for the Western District of Texas electronic case file system (at: <https://ecf.txwd.uscourts.gov/doc1/181131532614>), last accessed April 2, 2024.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: April 8, 2024

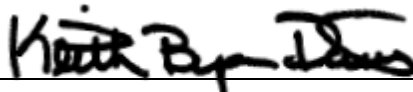


Exhibit A

(12) **United States Patent**
Rothschild

(10) **Patent No.:** **US 8,031,084 B2**
(45) **Date of Patent:** **Oct. 4, 2011**

(54) **METHOD AND SYSTEM FOR INFRACTION
DETECTION BASED ON VEHICLE TRAFFIC
FLOW DATA**

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Beach, FL (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **12/907,702**

(22) Filed: **Oct. 19, 2010**

(65) **Prior Publication Data**

US 2011/0032120 A1 Feb. 10, 2011

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/234,825,
filed on Sep. 22, 2008.

(51) **Int. Cl.**
G08G 1/01 (2006.01)

(52) **U.S. Cl.** **340/936; 340/905; 340/937**

(58) **Field of Classification Search** **340/933,**
340/995.1, 905, 936, 937; 701/301, 1, 23,
701/20

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,442,474 B1 * 8/2002 Trajkovic et al. 701/117
6,985,827 B2 * 1/2006 Williams et al. 702/142
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* cited by examiner

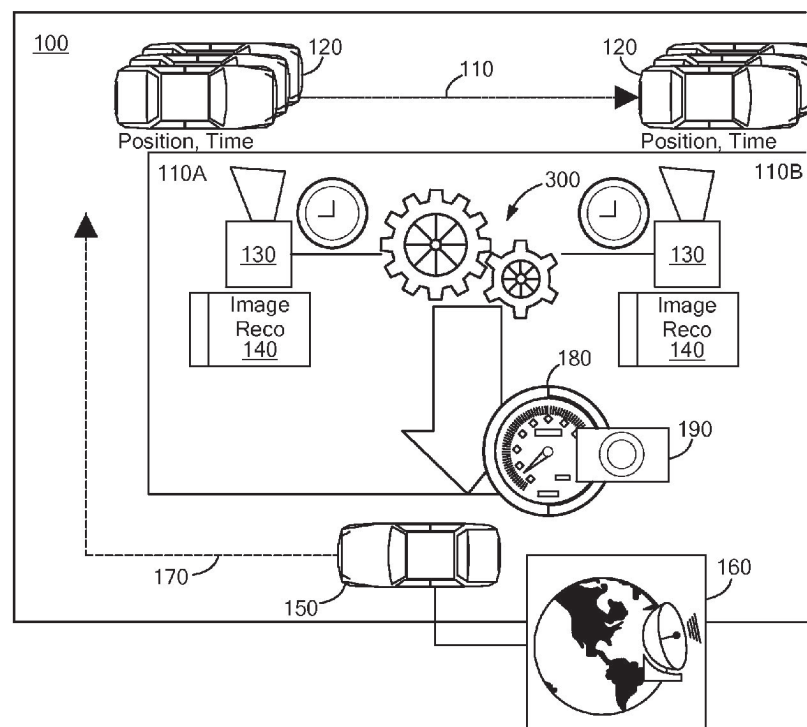
Primary Examiner — Anh V La

(74) *Attorney, Agent, or Firm* — Christopher & Weisberg,
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(57) **ABSTRACT**

Embodiments of the present invention provide a method, system and computer program product for vehicle speed acquisition and citation. In accordance with an embodiment of the present invention, multiple different imaging systems can be placed individually at different locations along a route of travel, such as a highway, byway or waterway. Images of different vehicles can be captured at each of the locations and different ones of the different vehicles can be image-recognized. A time of travel between pairs of the locations can be determined for selected ones of the different vehicles in order to compute a rate of travel for the selected ones of the different vehicles. A citation signal is generated when a speed of a vehicle exceeds a predetermined speed limit such that the vehicle owner may be automatically cited for speeding.

16 Claims, 5 Drawing Sheets



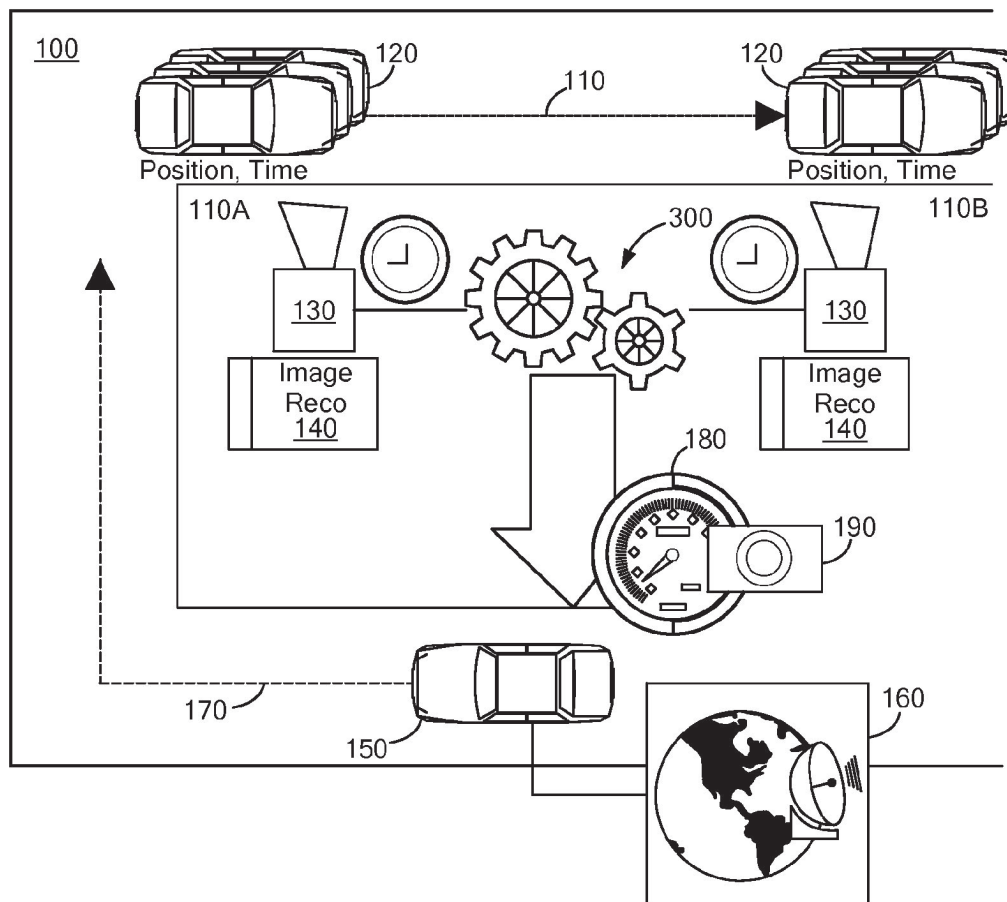


FIG. 1

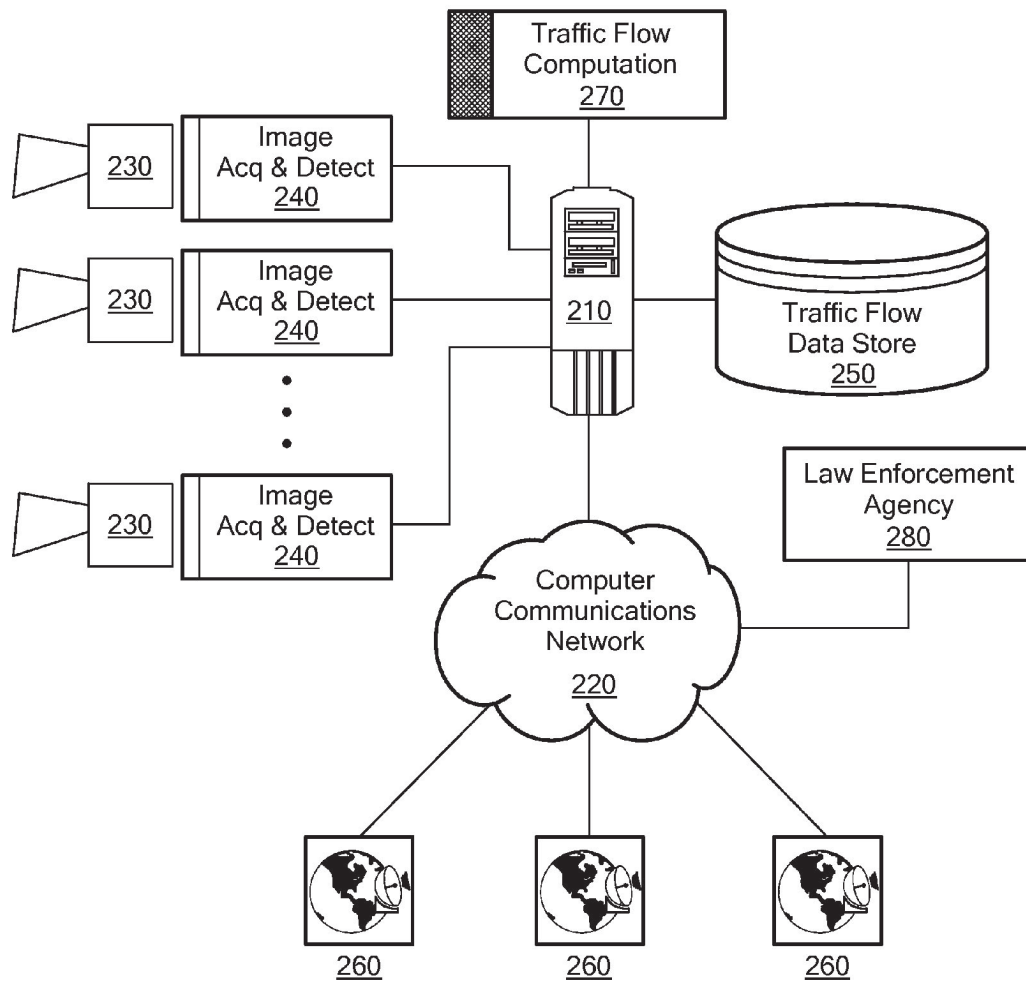


FIG. 2

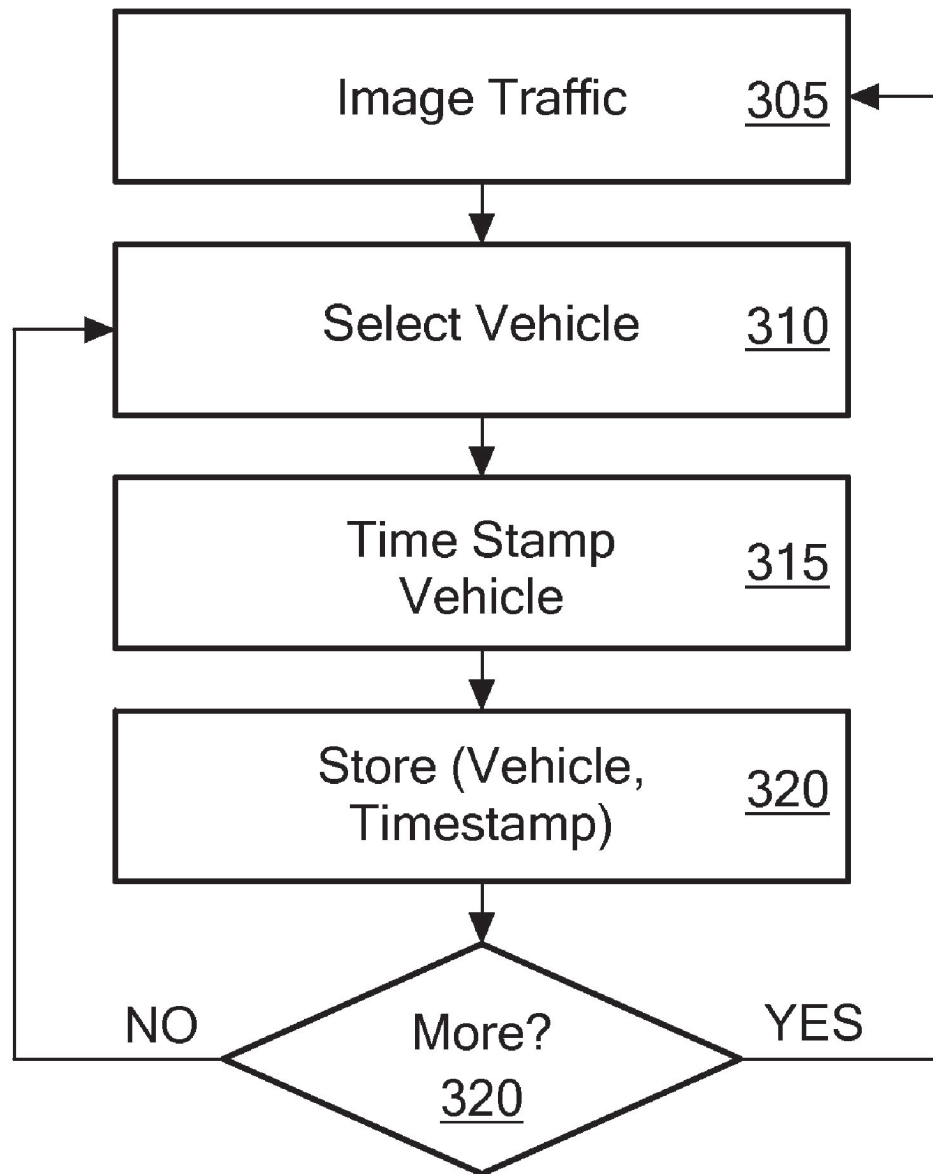
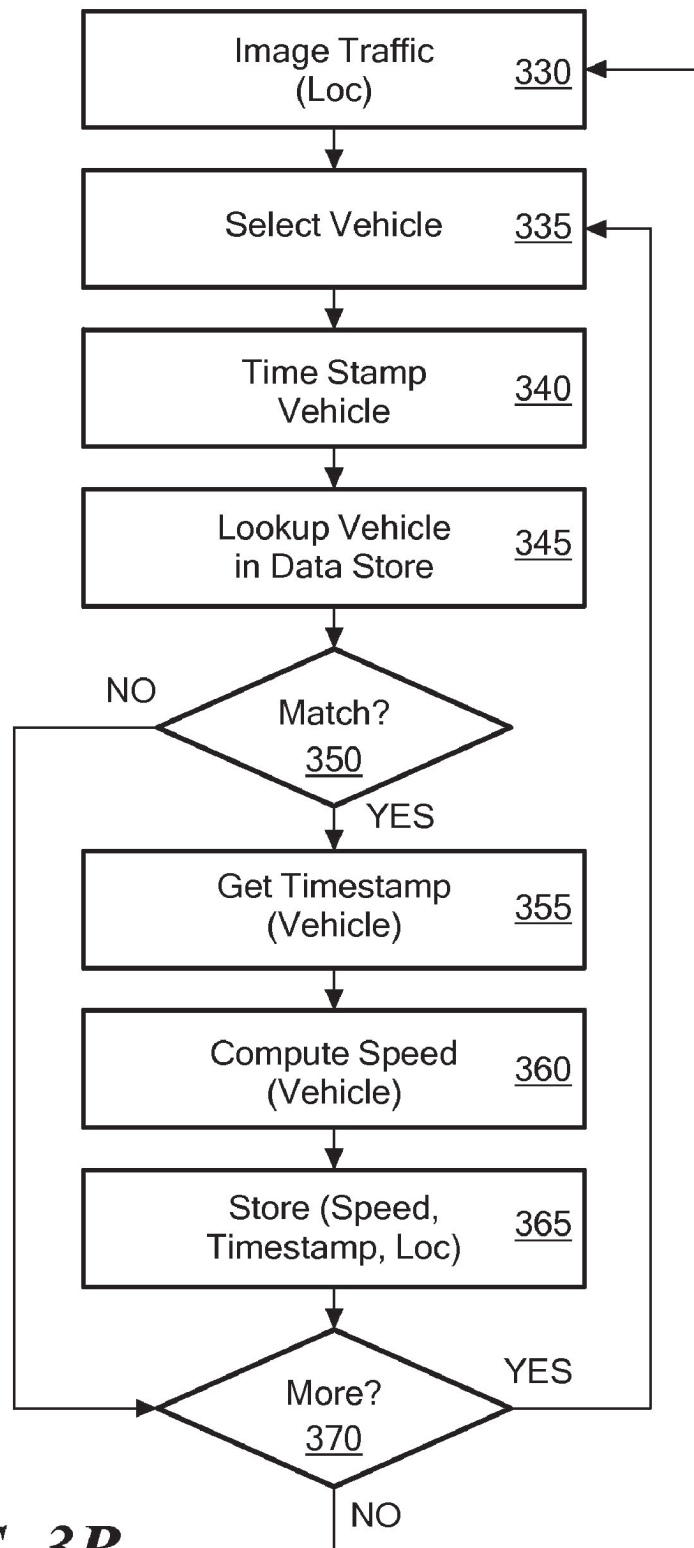


FIG. 3A

**FIG. 3B**

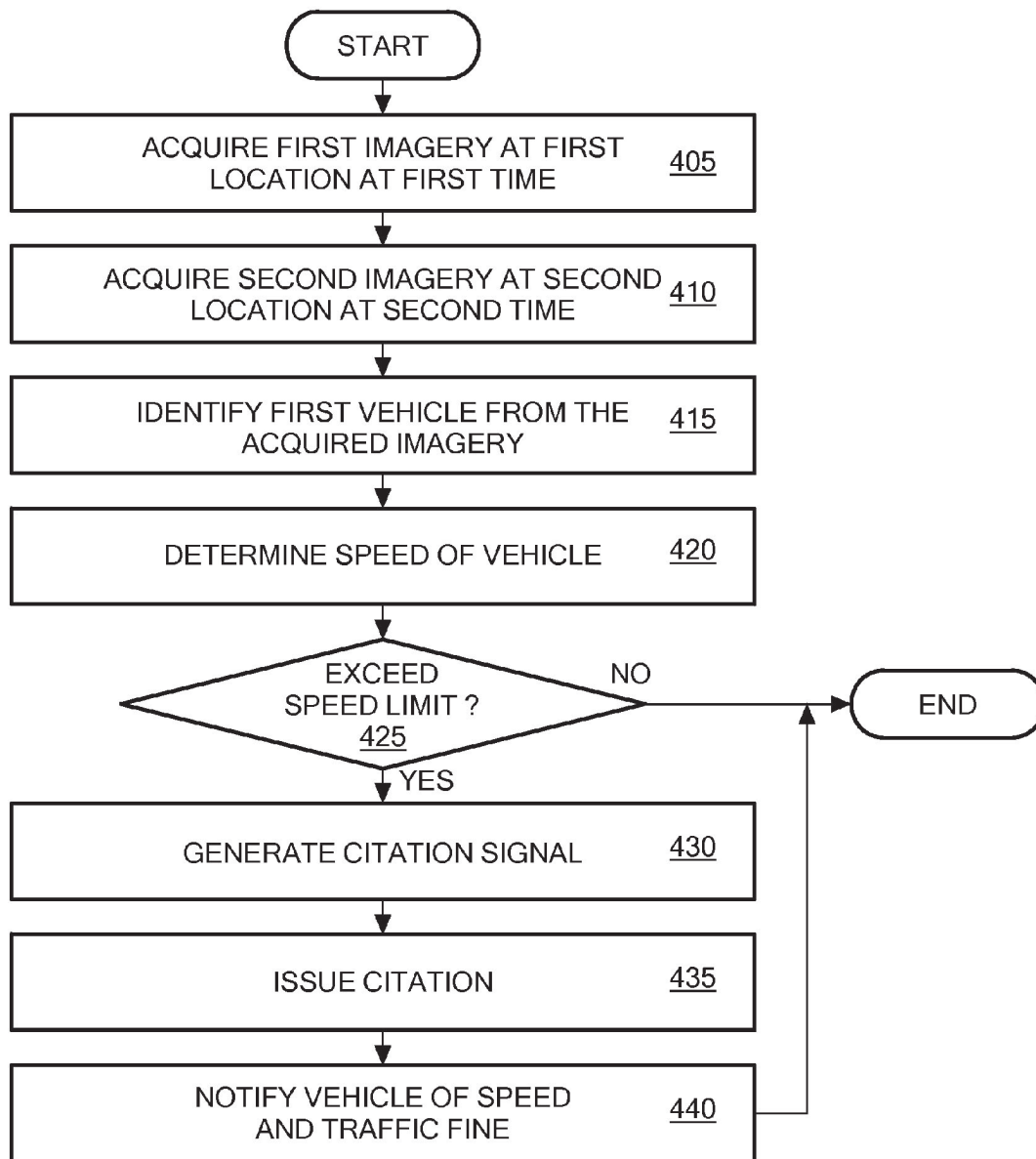


FIG. 4

US 8,031,084 B2

1

METHOD AND SYSTEM FOR INFRACTION DETECTION BASED ON VEHICLE TRAFFIC FLOW DATA

CROSS-REFERENCE TO RELATED APPLICATION

This application is a continuation-in-part of U.S. patent application Ser. No. 12/234,825, filed Sep. 22, 2008, entitled "Vehicle Traffic Flow Data Acquisition and Distribution," the entirety of which is incorporated herein by reference.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

n/a

FIELD OF THE INVENTION

The present invention relates to a method and system for traffic management, and in particular to a method and system for detecting and citing vehicle speed violations.

BACKGROUND OF THE INVENTION

The explosion of vehicle usage in the United States more than a half-century ago has brought tremendous benefit to the ordinary citizen. The advent of the interstate highway system now enables individuals to travel great distances at high speeds in short periods of time. The ease of travel afforded by the automobile and interstate highway system, however, is not without consequence. For most Americans, traffic has become a part of life and a daily annoyance. Indeed, the presence and anticipation of traffic affects ordinary citizens every day in planning travel and the timing of meetings with others.

For several decades, broadcast media adopted the responsibility of reporting traffic conditions over the airwaves such that listeners and viewers could more easily plan travel routing. Though traffic reports historically have been provided only at periodic intervals, given enough advance warning, savvy travelers could plan alternate routing responsive to the reporting of a traffic condition present at a portion of a planned route. Notwithstanding, planning an alternate route remained highly dependant on both the timing of the receipt of a traffic condition report and the knowledge of the traveler of an alternative route.

Global positioning system (GPS) technologies afford a tremendous leap forward in respect to onboard vehicle navigation and traffic condition avoidance. GPS technologies now can be found as standard equipment in many vehicles and provide the previously absent guarantee of alternate routing knowledge for drivers. Current GPS technologies further integrate with over-the-air broadcasting of real-time traffic conditions utilizing Internet connectivity so that drivers can correlate traffic conditions in real-time along a proposed route of travel.

Not all traffic conditions reported through broadcast traffic reports reflect a complete standstill of traffic. Rather, in most circumstances, traffic flows in an area of congestion—just not at a high rate of speed. Travelers with advance knowledge of congestion along a planned route make alternate routing decisions based upon the nature of traffic flow. So long as traffic flows at an acceptable speed, albeit not an optimal speed, travelers are less likely to prefer an alternate route. Knowing the rate of speed of traffic in a congested area, however, requires the traveler to rely upon the estimates of real-time

2

broadcast reports over the radio over television resulting from personally observed traffic speeds (typically by helicopter or live camera feed).

In addition to providing accurate information concerning congestion, there is a need to determine when a vehicle is speeding and thereby endangering others. Conventionally, a police officer detecting a speeding motorist waits at the side of the road in a traffic flow area to detect the speed of the vehicle and must then enter the flow of traffic to signal the driver of the speeding vehicle to pull over. This endangers the police officer and endangers other motorists. Further, a police department may have an insufficient number of officers to patrol every highway and road to catch speeding motorists. Therefore, there is a need for ticketing speeding motorists without jeopardizing the safety of police and other motorists, and without requiring the presence of a police officer to actually witness the speeding.

SUMMARY OF THE INVENTION

The present invention advantageously provides a method and system for detecting and reporting a speeding infraction by a vehicle. According to one aspect, a method includes acquiring first imagery of a plurality of vehicles at a first location at a first time. The method includes acquiring second imagery of a plurality of vehicles at a second location at a second time. A first vehicle is identified from the acquired first and second imagery. The speed of the vehicle is determined based on a difference between the first time and the second time and a distance between the first location and the second location. When the speed of the vehicle exceeds a predetermined speed, a citation signal is generated.

According to another aspect, the invention provides an apparatus for determining a vehicle speeding infraction. The apparatus includes a memory to store image data from a plurality of video capture devices spaced a known distance apart. The apparatus includes a processor in communication with the memory. The processor recognizes a vehicle appearing in a first image captured by a first one of the plurality of video capture devices at a first time and appearing in a second image captured by a second one of the plurality of video capture devices at a second time. The processor computes a speed of the vehicle based on the first time, the second time, and the known distance.

According to another aspect, the invention provides a system of determining a speeding violation by a vehicle. The system comprises a first image capture device at a first location and a second image capture device at a second location. The first image capture device has a first processor to perform an image recognition algorithm to detect a vehicle in a first image captured by the first image capture device, and to determine a first time at which the vehicle passes in proximity to the first location. The second image capture device has a second processor to perform an image recognition algorithm to detect a vehicle in a second image captured by the second image capture device, and to determine a second time at which the vehicle passes in proximity to the second location.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete understanding of the present invention, and the attendant advantages and features thereof, will be more readily understood by reference to the following detailed description when considered in conjunction with the accompanying drawings wherein:

US 8,031,084 B2

3

FIG. 1 is a schematic illustration of a process for vehicle traffic flow data acquisition and reporting for onboard vehicle navigation;

FIG. 2 is a schematic illustration of an onboard vehicle navigation data distribution data processing system configured for vehicle traffic flow data acquisition and reporting;

FIGS. 3A and 3B, taken together, are a flow chart illustrating a process for vehicle traffic flow data acquisition and reporting for onboard vehicle navigation; and

FIG. 4 is a flow chart of an exemplary process for vehicle traffic speed violation detection and citation in accordance with the principles of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

Embodiments of the present invention provide a method, system and computer program product for vehicle speed acquisition and citation. In accordance with an embodiment of the present invention, multiple different imaging systems can be placed individually at different locations along a route of travel, such as a highway, byway or waterway. Images of different vehicles can be captured at each of the locations and different ones of the different vehicles can be image-recognized. A time of travel between pairs of the locations can be determined for selected ones of the different vehicles in order to compute a rate of travel for the selected ones of the different vehicles. When a speed of a vehicle exceeds a speed limit, a citation signal is generated, and the vehicle owner may be automatically cited for speeding.

Before describing in detail exemplary embodiments that are in accordance with the present invention, it is noted that the embodiments reside primarily in combinations of apparatus components and processing steps related to implementing a system and method for managing digital images. Accordingly, the system and method components have been represented where appropriate by conventional symbols in the drawings, showing only those specific details that are pertinent to understanding the embodiments of the present invention so as not to obscure the disclosure with details that will be readily apparent to those of ordinary skill in the art having the benefit of the description herein.

As used herein, relational terms, such as “first” and “second,” “top” and “bottom,” and the like, may be used solely to distinguish one entity or element from another entity or element without necessarily requiring or implying any physical or logical relationship or order between such entities or elements.

In U.S. patent application Ser. No. 12/234,825, filed Sep. 22, 2008, entitled “Vehicle Traffic Flow Data Acquisition and Distribution,” a system and method for identifying traffic congestion are disclosed. The system and method includes capturing a first image of a vehicle at a first location at a first time, capturing a second image of the vehicle at a second location at a second time, and computing a speed of the vehicle between the two locations to determine an amount of congestion. The speed of many vehicles along the route can be determined and averaged to provide an average speed of traffic along the route. The average speed and a captured image can be communicated to an on-board navigation system of a vehicle to notify its driver of the average speed and congestion along a route. As is described herein, this ability to identify a vehicle and determine its speed can be used by law enforcement to detect and cite a speeding violation by the vehicle.

Referring now to the drawing figures in which like reference designators refer to like elements, there is shown in FIG. 1 a block diagram of an exemplary system constructed in

4

accordance with the principles of the present invention. As shown in FIG. 1, imaging systems 130 can be placed at different locations 110A, 110B of a road 100. Imaging systems 130 can acquire imagery of vehicles 120 passing through the location 110A, 110B. The imagery can include individual images, or a collection of images in video imagery. An image recognizer 140 can identify individual ones of the vehicles 120 such that an elapsed time between the identified individual ones of the vehicles 120 in the captured imagery at the different locations 110 can be used to determine a rate of travel (speed) by a processor 300 for each of the identified individual ones of the vehicles 120.

Thereafter, a vehicle 150 projected to travel along a route 170 passing through the locations 110A, 110B can retrieve the rate of travel 180 for multiple different ones of the vehicles 120 in order to identify a degree of congestion between the locations 110A, 110B. Further, imagery 190 of one or more of the locations 110A, 110B can be provided to the vehicle 150. Vehicle 150 could be a police vehicle that receives the identity, location, and speed of a speeding vehicle. Both the rate of travel 180 and the imagery 190 can be provided to the vehicle 150 through an Internet connected onboard navigation system 160. Alternatively, the rate of travel 180 can be provided to a subscriber in the vehicle 150 through text messaging, Web page, or byway of e-mail or a computer program utilized by the subscriber to display speeding violations. This allows the police office to be safely positioned outside of the traffic area and then allows the police officer in vehicle 150 to find and stop the speeder.

The process described in connection with FIG. 1 can be employed in an onboard vehicle navigation data distribution data processing system. For example, the rate of travel 180 can be provided to the subscriber in the vehicle 150 only when the rate of travel 150 falls above or below a threshold value (essentially an alert to speeding or an unacceptable traffic congestion). In the case where the vehicle 150 is the speeder, the speeder can be alerted of the same and that a citation is going to be issued or that a police officer is en route to issue the citation. Finally, as even yet another alternative, a precise location of the location 110B can be provided to the subscriber in the vehicle 150, for example in terms of latitude and longitude values.

The speed and imagery of a vehicle can also be transmitted to a central monitoring station. Imagery of the vehicle tag number may be used to identify the vehicle. For example, once the vehicle is identified as a speeding vehicle, the tag number, a Vehicle Identification Number (VIN), and the make and model of the vehicle may then be identified. A database may then be employed to determine the vehicle's owner. A citation may then be issued to the owner if it is determined that the vehicle is speeding or is detected committing other traffic violations, such as weaving in and out of lanes recklessly. The citation may be issued to the owner via at least one of email, U.S. mail, wirelessly to an electronic receiver on board the vehicle, and wirelessly to a mobile phone of the owner. The citation may be sent, for example, via text messaging to the owner's mobile phone.

In further illustration, FIG. 2 schematically depicts an onboard vehicle navigation data and vehicle speeding distribution data processing system configured for vehicle traffic flow data acquisition and reporting. The system can include a host server 210 communicatively coupled to multiple different image acquisition systems 230, each including an image acquisition and detection system 240. The host server 210 can host the execution of traffic flow and speeding computation logic 270. The traffic flow computation logic 270 can include program code enabled to compute a rate of travel for different

US 8,031,084 B2

5

vehicles at a location based upon duration of travel between pairs of the image acquisition systems 230 and determine whether to issue a citation signal based upon a determination that speeding has occurred. The program code further can be enabled to store the rate of travel in connection with each vehicle and a corresponding location within coupled traffic flow data store 250. The server 210 and the data store 250 may be accessed by a law enforcement agency 280 via the communications network 220 and the citation signal may be generated and sent to a law enforcement agency 280 by the host server 210.

Multiple different Internet connected onboard navigation systems 260 can be communicatively coupled to the host server 210 over computer communications network 220. Consequently, rates of travel for relevant locations along a planned route in the different ones of the onboard navigation systems 260 can be provided to end users through respective ones of the onboard navigation systems 260. Further, imagery of locations along a planned route in the different ones of the onboard navigation systems 260 can be provided to end users through respective ones of the onboard navigation systems 260. The imagery can be provided at the request of an end user through the selection of an icon in a user interface in a corresponding one of the onboard navigation systems 260 at the location along the planned route. Yet further, current weather conditions acquired for the relevant locations along a planned route can be provided to the different ones of the onboard navigation systems 260.

One embodiment is a system for determining a speeding violation by a vehicle. In this embodiment, the onboard navigation system 260 can be a system in the police officer's vehicle that receives the citation signal from the host server 210. A first image capture device 230 has a first processor 240 to perform an image recognition algorithm to detect a vehicle in a first image captured by the first image capture device 230. A second capture device 230 has a second processor 240 to perform an image recognition algorithm to detect the vehicle in a second image captured by the second image capture device 230. The time of image capture can be communicated to a central processor 210 that computes a speed of a vehicle using traffic flow computation software 270, based on the times of first and second image capture and a known distance between the first and second image capture devices. The traffic flow data store 250 can be used to store speed limit data such that a comparison can be made by the server 210 between calculated vehicle speed and the speed limit between the image acquisition systems 230 acquiring the imagery. The traffic flow data store 250 can also store citation fine data and be used by server 210 to provide this information to a law enforcement agency 280 or to the police officer via the onboard navigation system 260 in the vehicle 150.

Thus, in one embodiment, image recognition is performed by a processor at an image capture device. Alternatively, the images captured by image capture devices may be transmitted to a central processor that performs image recognition on the various images captured by the image capture devices. Image recognition may be achieved by applying an image recognition algorithm to a first image to produce a first result, applying the image recognition algorithm to a second image to produce a second result, and by comparing the first and second results to determine if the same vehicle is in both images. The central processor may also compute a speed of a vehicle and generate a citation signal when the speed of the vehicle exceeds a speed limit. The citation signal may be a data signal that includes the speed of the vehicle and/or the difference between the vehicle speed and the posted speed limit. The

6

image recognition algorithm may further detect a license tag or VIN of a vehicle and a make and model of a vehicle.

When the speed limit is exceeded, the speed of the vehicle can be transmitted to a law enforcement agency or officer. An image of the vehicle may also be transmitted to the law enforcement agency or officer. In one embodiment, a police officer may be able to remotely control a camera 230 that captures the image of the vehicles passing by. In some embodiments, the speed of the vehicle may be determined by the camera 230 or by a separate processor, e.g., server 210. The speed of the vehicle and the amount of the traffic fine for speeding may also be transmitted to an on-board navigation system of the speeding vehicle, or otherwise transmitted to the operator of the vehicle. In one embodiment, the processor 210 may automatically issue a paper citation to an owner of the vehicle. The owner of the vehicle may be identified by identifying a license tag number on the vehicle and correlating the tag number with the owner as recorded in a motor vehicle department database.

In yet further illustration of the operation of the traffic flow computation logic 270, FIGS. 3A and 3B, taken together, are a flow chart illustrating a process for vehicle traffic flow data acquisition and reporting for onboard vehicle navigation. Beginning in block 305 of FIG. 3A, traffic can be imaged at a first point in a route along a roadway. In block 310, a first vehicle in the image can be selected and time stamped in block 315 to record a time of acquiring the image. In block 320, the time stamp can be stored in connection with the selected vehicle and, in decision block 325, if additional vehicles remain to be time stamped in the image, the process can repeat in block 310. Otherwise, a new image can be acquired in block 305 and the process can continue as before through block 310.

Turning now to FIG. 3B, in block 330 traffic can be imaged at a subsequent point in the route along the roadway. In block 335, a first vehicle in the image can be selected and time stamped in block 340 to record a time of acquiring the image. In block 345, the vehicle can be compared to a data store of vehicles to determine whether a time stamp had been previously recorded for the vehicle at the first point in the route. In decision block 350, if a match is found, in block 355 the previously stored time stamp for the vehicle can be retrieved and in block 360 a rate of travel can be computed for the vehicle based upon the known distance between the points in the route and the duration of time taken by the vehicle to travel between the points according to the stored time stamp and the time stamp applied in block 340.

Thereafter, in block 365 the rate of travel can be recorded in connection with the subsequent point in the route and the time of acquiring the image at the subsequent point in the route. In decision block 370, if rates of travel for additional vehicles remain to be computed, the process can repeat in block 335 with the selection of a next vehicle in the image. Otherwise, a new image can be acquired at the subsequent point in the route in block 330.

Of note, by acquiring a multitude of rates of travel for the subsequent point in the route, an average rate of travel can be computed for the subsequent point in the route for a given range of time or for a given moment in time. The average rate of travel can be communicated to inquiring vehicles anticipating travel through the subsequent point in the route along with relevant imagery of the subsequent point in the route. Consequently, an accurate characterization of congestion for a location in a route of travel can be communicated in real time to inquiring travelers through an Internet connected onboard navigation system.

US 8,031,084 B2

7

FIG. 4 is a flow chart of an exemplary process for vehicle traffic speed violation detection and citation in accordance with the principles of the present invention. In block 405, a first image is acquired at a first location at a first time. At block 410, a second image is acquired at a second location at a second time. At block 415, an identity of a vehicle appearing in both the first and second images is acquired. The speed of the vehicle is determined at block 420. The speed can be determined from the ratio of the distance between the first and second location and the difference between the first time and the second time. At block 425, the system determines if the speed limit has been exceeded by the identified vehicle. If not, the process ends. If the speed limit has been exceeded, a citation signal is generated at block 430. The citation signal may also include the speed of the vehicle, the vehicle's tag number, the vehicle's location and an image of the vehicle. A paper citation may automatically be issued at block 435 or a police officer alerted. Further, the speed and amount of the fine for speeding may be communicated to the vehicle at block 440.

Embodiments of the invention can take the form of an entirely hardware embodiment, an entirely software embodiment or an embodiment containing both hardware and software elements. In a preferred embodiment, the invention is implemented in software, which includes but is not limited to firmware, resident software, microcode, and the like. Furthermore, the invention can take the form of a computer program product accessible from a computer-usable or computer-readable medium providing program code for use by or in connection with a computer or any instruction execution system.

For the purposes of this description, a computer-usable or computer readable medium can be any apparatus that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device. The medium can be an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system (or apparatus or device). Examples of a computer-readable medium include a semiconductor or solid state memory, magnetic tape, a removable computer diskette, a random access memory (RAM), a read-only memory (ROM), a rigid magnetic disk and an optical disk. Current examples of optical disks include compact disk-read only memory (CD-ROM), compact disk-read/write (CD-R/W) and DVD.

A data processing system suitable for storing and/or executing program code will include at least one processor coupled directly or indirectly to memory elements through a system bus. The memory elements can include local memory employed during actual execution of the program code, bulk storage, and cache memories which provide temporary storage of at least some program code in order to reduce the number of times code must be retrieved from bulk storage during execution. Input/output or I/O devices (including but not limited to keyboards, displays, pointing devices, etc.) can be coupled to the system either directly or through intervening I/O controllers. Network adapters may also be coupled to the system to enable the data processing system to become coupled to other data processing systems or remote printers or storage devices through intervening private or public networks. Modems, cable modem and Ethernet cards are just a few of the currently available types of network adapters.

It will be appreciated by persons skilled in the art that the present invention is not limited to what has been particularly shown and described herein above. In addition, unless mention was made above to the contrary, it should be noted that all of the accompanying drawings are not to scale. A variety of

8

modifications and variations are possible in light of the above teachings without departing from the scope and spirit of the invention, which is limited only by the following claims.

What is claimed is:

1. A method of infraction detection based on vehicle traffic flow data, the method comprising:
 - acquiring first imagery of a plurality of vehicles at a first location at a first time;
 - acquiring second imagery of a plurality of vehicles at a second location at a second time;
 - identifying a first vehicle from the acquired first imagery and the acquired second imagery;
 - determining a speed of the first vehicle;
 - generating a citation signal when the speed of the first vehicle exceeds a predetermined speed; and
 - attempting to transmit the citation signal to a device of a person associated with the vehicle.
2. The method of claim 1, wherein the citation signal is communicated to a law enforcement agency.
3. The method of claim 2, wherein at least a portion of at least one of the acquired first and second imagery is communicated to the law enforcement agency.
4. The method of claim 1, wherein the citation signal includes a license tag of the first vehicle and a location of the vehicle.
5. The method of claim 1, wherein the speed of the vehicle is determined based on a difference between the first time and the second time and a distance between the first location and the second location.
6. The method of claim 5, wherein the citation signal includes a difference between the speed of the first vehicle and the predetermined speed.
7. The method of claim 1, wherein the device is a mobile phone of the person associated with the vehicle.
8. An apparatus for determining a vehicle speeding infraction, the system comprising:
 - memory to store image data from a plurality of video capture devices spaced a known distance apart; and
 - a processor in communication with the memory, the processor;
 - recognizing a vehicle appearing in a first image captured by a first one of the plurality of video capture devices at a first time and appearing in a second image captured by a second one of the plurality of video capture devices at a second time;
 - computing a speed of the recognized vehicle based on the first time, the second time, and the known distance;
 - generating a citation signal when the computed speed exceeds a predetermined speed; and
 - attempting to communicate the citation signal to a device of a person associated with the vehicle.
9. The apparatus of claim 8, wherein the citation signal includes the speed, location, and identity of the vehicle.
10. The apparatus of claim 9, wherein the citation signal and the second image is transmitted to a law enforcement agency.
11. The apparatus of claim 8, wherein recognizing the vehicle comprises:
 - applying an image recognition algorithm to the first image to produce a first result;
 - applying the image recognition algorithm to the second image to produce a second result; and
 - comparing the first and second results.
12. The apparatus of claim 11, wherein the image recognition algorithm detects a make and model of the vehicle.

US 8,031,084 B2

9

13. The apparatus of claim 12, wherein the image recognition algorithm detects at least one of a license tag number of the vehicle, and a Vehicle Identification Number (VIN) of the vehicle.

14. The apparatus of claim 8, wherein the device is an on board navigation system of the vehicle. 5

15. A system of determining a speeding violation by a vehicle, the system comprising:

a first image capture device at a first location, having a first processor to perform an image recognition algorithm to detect the vehicle in a first image captured by the first image capture device and to determine a first time at which the vehicle passes in proximity to the first location; 10

a second image capture device at a second location having a second processor to perform an image recognition algorithm to detect the vehicle in a second image captured by the second image capture device and to determine a second time at which the vehicle passes in proximity to the second location; and 15

10

a third processor to:

compute a speed of the vehicle based on a known distance between the images captured by the first and second image capture devices and based on the first and second times;

generate a citation signal when the speed of the vehicle exceeds a predetermined speed; and

attempting to transmit the citation signal to a device of a person associated with the vehicle.

16. The system of claim 15, further comprising a third processor to:

receive an image of the vehicle from at least one of the first and second processor;

compute a speed of the vehicle; and

communicate the image of the vehicle and the speed of the vehicle to a law enforcement officer.

* * * * *

Exhibit B

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISIO**

CONTIGUITY, LLC, <i>Plaintiff</i>	§	
	§	
	§	W-23-CV-00038-XR
-vs-	§	
	§	
CONDUENT BUSINESS SERVICES, LLC, <i>Defendant</i>	§	
	§	
	§	

ORDER

On this day, the Court considered the above-captioned case. Before this Court is Defendant’s motion to dismiss (ECF No. 7), Plaintiff’s response (ECF No. 10), and Defendant’s reply (ECF No. 16). After careful consideration, Defendant’s Motion to Dismiss is **GRANTED**.

BACKGROUND

Plaintiff is the assignee of all right, title, and interest in U.S. Patent No. 8,031,084 (the “’084 Patent” or “the Patent”), which was issued on October 4, 2011. ECF No. 1 at 2; ECF No. 1-1. The patent is titled “method and system for infraction detection based on vehicle traffic flow data” and is used to monitor vehicle speeds. *Id.* First, multiple devices are placed at several geographic locations along a single route, such as a highway. ECF No. 1-1. Then, the devices monitor the time it takes for a vehicle to travel from one device to another by taking images at each station and comparing the timestamps of the images, thereby calculating the vehicle’s speed. *Id.* If the vehicle travels faster than the predetermined speed limit for the area, an automatic citation signal is generated. *Id.*

Plaintiff filed suit in federal court alleging causes of action for direct and induced patent infringement related to the ’084 Patent. ECF No. 1. Plaintiff states that Defendant infringes on

claims 1¹ and 4² by creating a similar system that uses video and radar to track, document, and report vehicles' speed while traveling through specified zones.³ ECF No. 1-2.

Defendant advances three arguments in its motion to dismiss. First, Defendant argues that '084 Patent claims 1 and 4 are "directed to the abstract idea of collecting information, analyzing it, and displaying certain results of the collection and analysis," and are thus abstract and ineligible for patent protection.⁴ ECF No. 7 at 6. Second, Defendant maintains that the claims are unsupported by the '084 Patent's specifications, as required under 35 U.S.C. § 112. *Id.* at 7. Finally, Defendant argues that Plaintiff has not pled pre-suit knowledge of the asserted patent so as to succeed on an indirect infringement claim. Because this Court resolves Defendant's motion on the first issue, the other challenges are not addressed.

LEGAL STANDARDS

I. Motion to Dismiss

In patent cases, issues that are unique to patent law are governed by Federal Circuit precedent. *See Woods v. DeAngelo Marine Exhaust Sys., Inc.*, 692 F.3d 1272, 1279 (Fed. Cir. 2012). But because motions to dismiss under Federal Rule of Civil Procedure 12(b)(6) raise purely procedural issues, courts apply the law of the regional circuit—here, the Fifth Circuit—when

¹ Claim 1 provides: A method of infraction detection based on vehicle traffic flow data, the method comprising:
acquiring first imagery of a plurality of vehicles at a first location at a first time;
acquiring second imagery of a plurality of vehicles at a second location at a second time;
identifying a first vehicle from the acquired first imagery and the acquired second imagery;
determining a speed of the first vehicle;
generating a citation signal when the speed of the first vehicle exceeds a predetermined speed; and
attempting to transmit the citation signal to a device of a person associated with the vehicle.

² Claim 4 is dependent on claim 1 and reads: "The method of claim 1, wherein the citation signal includes a license tag of the first vehicle and a location of the vehicle."

³ Plaintiff has identified only claims 1 and 4 in its complaint. ECF No. 1. No other claims are at issue.

⁴ Discussing a "claim" in the patent context can be confusing given the term's dual meaning. "Claim" might refer to a "cause of action," or it might refer to the portion of a patent that follows the patent's specification and defines the scope of the patentee's monopoly. *Senju Pharm. Co. v. Apotex Inc.*, 746 F.3d 1344, 1349 (Fed. Cir. 2014). To avoid confusion, the Court uses "cause of action" when referring to Plaintiff's allegations and uses "claim" in the patent sense.

deciding whether such a motion should be granted. *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1347 (Fed. Cir. 2016).

Federal Rule of Civil Procedure 12(b)(6) allows a party to move for the dismissal of a complaint for “failure to state a claim upon which relief can be granted.” To survive a motion to dismiss, “a complaint must contain sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 678.

In considering a motion to dismiss under Rule 12(b)(6), all factual allegations from the complaint should be taken as true, and the facts are to be construed in the light most favorable to the nonmoving party. *Fernandez-Montes v. Allied Pilots Assoc.*, 987 F.2d 278, 284 (5th Cir. 1993). Still, a complaint must contain “more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do.” *Twombly*, 550 U.S. at 555. “[N]aked assertions’ devoid of ‘further factual enhancement,’” and “threadbare recitals of the elements of a cause of action, supported by mere conclusory statements,” are not entitled to the presumption of truth. *Iqbal*, 556 U.S. at 678 (quoting *Twombly*, 550 U.S. at 557); *see also R2 Invs. LDC v. Phillips*, 401 F.3d 638, 642 (5th Cir. 2005) (stating that the Court should neither “strain to find inferences favorable to plaintiffs” nor accept “conclusory allegations, unwarranted deductions, or legal conclusions.”).

II. Patent Eligibility

To be eligible for patent protection, a patent must comprise “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.”⁵ 35 U.S.C. § 101. However, “basic tools[s] of scientific and technological work,” such as those related to laws of nature, natural phenomena, and abstract ideas, are not patentable. *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013).

In *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012) and *Alice Corp. Pty. v. CLS Bank Int’l*, 573 U.S. 208 (2014), the Supreme Court laid out a two-part framework to resolve patent eligibility disputes under § 101. First, courts must “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Alice*, 573 U.S. at 217. If so, courts must then “consider the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application.” *Id.* (internal quotations omitted). This second step is often described as the search for an “inventive concept,” which ensures that the “patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Mayo*, 566 U.S. at 72–73.

Patentability under 35 U.S.C. § 101 is a threshold legal issue that may properly be resolved at the motion to dismiss stage. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121 (Fed. Cir. 2018). Although patent eligibility is a question of law, “there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination.” *Aatrix*, 882 F.3d at 1128. For example, at step two of *Alice/Mayo*, the Court must examine whether the claims contain an “inventive concept.” Claims constitute

⁵ “The term ‘process’ means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” 35 U.S.C.A. § 100(b).

inventive concepts when they “involve more than performance of well-understood, routine, [and] conventional activities previously known to the industry,” *Aatrix*, 882 F.3d at 1128, which itself is a question of fact. Thus, relying only on the materials appropriate at the motion to dismiss stage, “when the complaint contains concrete allegations that individual elements and the claimed combination are not well-understood, routine, or conventional activity, the asserted patent can survive a Rule 12(b)(6) motion at *Alice* step two.” *Mirror Imaging, LLC v. PNC Bank, N.A.*, No. W-21-CV-00518-ADA, 2022 WL 229363, at *4 (W.D. Tex. Jan. 26, 2022).

DISCUSSION

I. *Alice/Mayo* Step One

At *Alice/Mayo* step one, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Internet Pats. Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). In doing so, courts should be cautious of “oversimplifying the claims because at some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas[.]” *In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (internal quotations omitted).

Defendant argues that the claims are “directed to the abstract idea of collecting information, analyzing it, and displaying certain results of the collection and analysis,” albeit in the specific context of vehicle speed acquisition and citation. ECF No. 7 at 6. Directing the Court to *Univ. of Fla. Rsch. Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363 (Fed. Cir. 2019) and *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016), Defendant argues that the Federal Circuit has previously found similar patents ineligible for protection as abstract data collection methods.

Plaintiff responds that this is an oversimplification of its patent and that the '084 Patent is not “simply a method of organization information.” ECF No. 10 at 13. Instead, Plaintiff maintains that the '084 Patent resolves specific problems associated with traffic and road safety. *Id.* Furthermore, Plaintiff argues that the '084 Patent was the first of its kind to use imaging to detect speeding infractions which, as the first invention, provided a significant advancement over prior (presumably human) methods of detecting infractions. *Id.* at 8. Finally, Plaintiff points the Court to the '084 Patent specification diagrams as evidence that the patent is sufficiently granular to indicate improvements from prior technology. *Id.* at 12.

After evaluating the pleadings and the '084 Patent specifications, the Court has determined that the '084 Patent is focused on the abstract concept of collecting and analyzing data, and merely mechanizes concepts capable of resolution by the human brain.

When evaluating whether a patent is directed towards an abstract concept, the Federal Circuit advises courts to evaluate whether the claims “focus on a specific means or method[] or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery.” *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 909 (Fed. Cir. 2017). To that end, the Federal Circuit has “held claims ineligible as directed to an abstract idea when they merely collect electronic information, display information, or embody mental processes that could be performed by humans.” *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1346–47 (Fed. Cir. 2017). Like the patents at issue in *Univ. of Fla. Rsch. Found., Inc.* and *Elec. Power Grp. LLC*, the '084 Patent is fundamentally concerned with collecting data for presentation.

In *Univ. of Fla. Rsch. Found., Inc.*, the Federal Circuit assessed a method and system for converting physiologic data from hospital bedside machines into a single, usable format.

Previously, many hospitals manually tracked patient data because computers could not successfully integrate data from different bedside machines. The Federal Circuit found that the patent in question “proposes replacing the pen and paper methodologies with data synthesis technology in the form of device drivers written for the various bedside machines that allow the bedside device to present data from the various bedside machines in a configurable fashion within a single interface.” *Univ. of Fla. Rsch. Found., Inc.*, 916 F.3d at 1367. In so finding, the court determined that this was a “quintessential ‘do it on a computer’ patent: it acknowledges that data from bedside machines was previously collected, analyzed, manipulated, and displayed manually, and it simply proposes doing so with a computer.” *Id.* Moreover, because the patent described its method in “purely functional terms,” without explaining “specific improvement[s] to the way computers operate,” the court found the patent was “directed to abstract ideas.” *Id.* at 1368.

Similarly, the plaintiffs in *Elec. Power Grp., LLC*, owned patents describing a method for real-time detection and analysis of events on an interconnected electric power grid. Essentially, the system received data from several sources, analyzed that data based on pre-determined metrics, and displayed both the event data and analysis. Like *Univ. of Fla. Rsch. Found., Inc.*, the Federal Circuit found that the patent was focused “on collecting information, analyzing it, and displaying certain results of the collection and analysis.” *Elec. Power Grp., LLC*, 830 F.3d at 1353.

The '084 Patent is analogous to patents in both *Univ. of Fla. Rsch. Found., Inc.* and *Elec. Power Grp., LLC* and falls into the category of collecting information. The '084 system collects information (images of a vehicle), analyzes it (compares two images to calculate speed), and displays results (whether or not the vehicle exceeded the speed limit). While Plaintiff notes that the collection is directed to a particular problem—traffic congestion—limiting the invention to a technological environment does “not make an abstract concept any less abstract.” *Elec. Power*

Grp., 830 F.3d at 1353 (“Accordingly, we have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.”).

Moreover, like the claims in *Univ. of Fla. Rsch. Found., Inc.*, the ’084 Patent describes its method in purely functional terms. For example, claim 1 covers “acquiring” images, “identifying” vehicles, “determining the speed,” “generating a citation,” and “attempting to transmit” the citation. In doing so, the claims are “directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.” *In re TLI*, 823 F.3d at 612.

Moreover, although the program conducts mathematical analysis on the images, “scientific truth[s], or the mathematical expression of it, [are] not patentable invention[s].” *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972); *see also* ECF No. 1-1 (“The speed of the vehicle is determined based on a difference between the first time and the second time and a distance between the first location and the second location.”). Relatedly, while the ’084 “computes speed,” ECF No. 1-1, the calculations essentially equate to a human mental process, which is a subcategory of abstract ideas. *Benson*, 409 U.S. at 67 (“[M]ental processes . . . are not patentable.”); *Elec. Power Grp., LLC*, 30 F.3d at 1355 (“In a similar vein, we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.”).

Thus, claims 1 and 4 are directed to the abstract idea of collecting, analyzing, and displaying data.

II. *Alice/Mayo* Step Two

Step two of the *Alice/Mayo* framework requires this Court to determine whether claims 1 and 4 “contain[] an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (internal quotations omitted). The claims must include “additional features” to ensure “that the [claims are] more than a drafting effort designed to monopolize” the abstract idea. *Alice*, 573 U.S. at 221. “These additional features cannot simply be well-understood, routine, [or] conventional activities previously known to the industry.” *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 773 (Fed. Cir. 2019) (internal quotations omitted). However, “patentees who adequately allege their claims contain inventive concepts survive a § 101 eligibility analysis under Rule 12(b)(6).” *ChargePoint, Inc.*, 920 F.3d at 773 (internal citations omitted).

Plaintiff claims that the ’084 Patent is the first mechanized “solution” to determining traffic congestion and speeding infractions. ECF No. 10 at 15. Because the record does not contain evidence to the contrary, Plaintiff argues that it has sufficiently pled factual allegations of improvements of the prior (nonexistent) art. *Id.* Defendant counters that this argument goes to the *novelty* of the idea, which is irrelevant under the *Alice/Mayo* framework. ECF No. 16 at 11.

Plaintiff’s claims do not describe an inventive concept. At their essence, claims 1 and 4 describe a method to assess a vehicle’s speed: Plaintiff’s devices acquire images of a vehicle at two different points, identify the vehicle in both images as one and the same, determine the vehicle’s speed using basic arithmetic, and then either generate a citation or transfer this information to a “subscriber,” oftentimes law enforcement. Claims 1 and 4 effectively digitize a mathematical equation (speed = distance ÷ time) but fail to provide any technical detail on how the invention goes beyond plugging in collected data to that equation. For example, the claims do

not cover the specific camera system used in the devices, the vehicle system that integrates the images with a navigation system, nor the technology that automatically generates a citation. Even if Plaintiff is correct that it was the first to digitize detecting traffic infractions, without providing additional details of the unique collection methods—perhaps the camera, the means of reporting the data or the communication system—or algorithm, the claims merely embody an abstract concept. In conclusion, “simply implementing a mathematical principle on a physical machine, namely, a computer, [is] not a patentable application of that principle.” *Mayo*, 566 U.S. at 84 (citing *Benson*, 409 U.S. at 71).

Therefore, the asserted claims of the ’084 Patent do not recite any inventive concepts under step of the *Alice/Mayo* framework. The claims are invalid under 35 U.S.C. § 101.

CONCLUSION

Defendant’s Motion to Dismiss is **GRANTED** as to claims 1 and 4 of the ’084 Patent. Plaintiff’s cause of action is **DISMISSED WITHOUT PREJUDICE** and Plaintiff is granted leave to file an amended complaint curing the deficiencies identified herein within fourteen (14) days of the filing of this order.

It is so **ORDERED**.

SIGNED this 12th day of May, 2023.



Xavier Rodriguez
United States District Judge

Exhibit C


U.S. 8,031,084			
1. A method of infraction detection based on vehicle traffic flow data, the method comprising:	8. An apparatus for determining a vehicle speeding infraction, the system comprising: memory to store image data from a plurality of video capture devices spaced a known distance apart; and a processor in communication with the memory, the processor	15. A system of determining a speeding violation by a vehicle, the system comprising:	
acquiring first imagery of a plurality of vehicles at a first location at a first time;	recognizing a vehicle appearing in a first image captured by a first one of the plurality of video capture devices at a first time	a first image capture device at a first location, having a first processor to perform an image recognition algorithm to detect the vehicle in a first image captured by the first image capture device and to determine a first time at which the vehicle passes in proximity to the first location;	collecting data
acquiring second imagery of a plurality of vehicles at a second location at a second time;	and appearing in a second image captured by a second one of the plurality of video capture devices at a second time;	a second image capture device at a second location having a second processor to perform an image recognition algorithm to detect the vehicle in a second image captured by the second image capture device and to determine a second time at which the vehicle passes in proximity to the second location; and	collecting data
identifying a first vehicle from the acquired first imagery and the acquired second imagery; determining a speed of the first vehicle;	computing a speed of the recognized vehicle based on the first time, the second time, and the known distance;	a third processor to: compute a speed of the vehicle based on a known distance between the images captured by the first and second image capture devices and based on the first and second times;	analyzing data
generating a citation signal when the speed of the first vehicle exceeds a predetermined speed; and	generating a citation signal when the computed speed exceeds a predetermined speed; and	generate a citation signal when the speed of the vehicle exceeds a predetermined speed; and	analyzing data
attempting to transmit the citation signal to a device of a person associated with the vehicle.	attempting to communicate the citation signal to a device of a person associated with the vehicle.	attempting to transmit the citation signal to a device of a person associated with the vehicle.	displaying or transmitting / communicating data
2. The method of claim 1, wherein the citation signal is communicated to a law enforcement agency.			displaying or transmitting / communicating data
3. The method of claim 2, wherein at least a portion of at least one of the acquired first and second imagery is communicated to the law enforcement agency.			displaying or transmitting / communicating data
4. The method of claim 1, wherein the citation signal includes a license tag of the first vehicle and a location of the vehicle.			analyzing data displaying or transmitting / communicating data

Exhibit D

12/907,702 | PAM-006:

METHOD AND SYSTEM FOR INFRACTION DETECTION BASED ON VEHICLE TRAFFIC FLOW DATA

[PUBLIC VIEW](#)


Application #	Confirmation #	Attorney Docket #	Patent #	Filing or 371 (c) date	Status
12/907,702	2490	PAM-006	8,031,084  Issued - 10/04/2011	10/19/2010	Patented Case 09/14/2011

2 Assignments found

Assignment 1

Reel/frame 025162/0284	Date recorded 10/19/2010	Pages 3
Conveyance ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS). 		
Assignors ROTHSCHILD, LEIGH M.	Execution date 10/19/2010	Correspondent ALAN M. WEISBERG CHRISTOPHER & WEISBERG, P.A. 200 EAST LAS OLAS BOULEVARD, SUITE 2040 FORT LAUDERDALE, FL 33301
Assignee ARIEL INVENTIONS, LLC 19333 COLLINS AVENUE APARTMENT #2501 SUNNY ISLES BEACH, FLORIDA 33160-2336		

Assignment 2

Reel/frame 060910/0534	Date recorded 08/26/2022	Pages 5
Conveyance ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS). 		
Assignors ARIEL INVENTIONS, LLC	Execution date 08/25/2022	Correspondent DIANE MARIE WELBY 1524 WHITEHALL DRIVE #205 DAVIE, FL 33324
Assignee		

Disclaimer: Assignment information on the assignment database reflects assignment documents that have been actually recorded. If the assignment for a patent was not recorded, the name of the assignee on the patent application publication or patent may be different. If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 571-272-3350.

Exhibit E

Application No. 12/907,702
Confirmation No.: 2490
Filed: October 19, 2010
Attorney Docket No.: 1624-4CIP (CW-3)

REMARKS

Claims 1-3, 5-7, 9, 11, 12, 14-17, and 20-22 are pending in the Application and are now presented for examination. Claims 1, 5, 9, 11 and 17 have been amended. Claims 4, 8, 10, 13, 18, and 19 have been cancelled, without prejudice and without disclaimer of subject matter. Claims 21 and 22 have been added. No new matter has been added.

Claims 1, 9 and 17 are independent.

The claims of the present invention are directed to an automobile infraction detection system. A first and second image of a number of vehicles are acquired at first and second locations, respectively. A first vehicle is detected in the first and second images and a speed of the vehicle is determined. If the vehicle speed exceeds a predetermined speed, then an attempt is made to transmit a citation signal to a device of a person associated with the vehicle, such as a driver of the vehicle or owner of the vehicle. The wireless device may be, for example, a mobile phone of the person or an onboard navigation system of the vehicle.

Claim Rejection – 35 U.S.C. §102

Claims 1-3, 6, 7, 9-12, 14, 17, 18, and 20

On page 2 of the Office Action, Claims 1-3, 6, 7, 9-12, 14, 17, 18, and 20 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,442,474 to Trajkovic (“Trajkovic”). Claim 18 is cancelled without prejudice or disclaimer, thereby rendering its rejection moot. Applicants respectfully traverse the remaining rejections.

Application No. 12/907,702
Confirmation No.: 2490
Filed: October 19, 2010
Attorney Docket No.: 1624-4CIP (CW-3)

Independent Claims 1, 9, and 17

Claims 1, 9, and 17 recite generating a citation signal indicating a speeding violating and attempting to transmit or attempting to communicate “the citation signal to a device of a person associated with the vehicle.” This feature is not disclosed or suggested by Trajkovic.

Trajkovic describes a traffic monitoring system coupled to a plurality of image capture devices that capture images of a roadway. Trajkovic’s traffic monitoring system employs a traffic violation detection system that issues a ticket when a vehicle exceeds a speed limit, makes an unlawful turn, or fails to stop at a stop sign. Trajkovic, FIG. 1 and 3. Merely issuing a ticket is not the same as transmitting a signal that indicates a violation. Put another way, Trajkovic fails to teach or suggest attempting to transmit or communicate “a citation signal to a wireless device of a person associated with the vehicle,” as in Claims 1, 9, and 17

The Office Action relies on U.S. Patent Publication No. 2005/0248469 to DeKock *et al.* (“DeKock”), elements 52, and 54, as disclosing sending a citation signal wirelessly to a receiver on board a vehicle. Office Action, page 5. However, elements 52 and 54 merely show a user device and a display, respectively. DeKock, paragraphs 56-60, describes a system that includes a plurality of video cameras at different locations. The video camera data can be sent to a computer that uses the data to determine a time it takes to travel from one point to another. The time is sent to a mobile user. However, sending data to a mobile user simply does not equate to generating and transmitting a *citation signal*. DeKock does not teach or suggest generating a traffic citation signal and “transmitting the citation signal to a wireless device of a person associated with the vehicle,” as in Claims 1, 9, 17. Hence, Claims 1, 9 and 17 are allowable, and withdrawal of their rejections is respectfully requested.

Application No. 12/907,702
Confirmation No.: 2490
Filed: October 19, 2010
Attorney Docket No.: 1624-4CIP (CW-3)

Dependent Claims 2-3, 6, 7, 10-12, 14, and 20

Claims 2-3, 6, 7, 10-12, 14, and 20 are each dependent either directly or indirectly from one or another of independent Claims 1, 9, and 17, discussed above. These claims recite additional limitations which, in conformity with the features of their corresponding independent claim, are not disclosed or suggested by the art of record. The dependent claims are therefore believed patentable. However, the individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

Claim Rejection – 35 U.S.C. §103

Dependent Claims 4, 8, 13, and 19

On page 5 of the Office Action, Claims 4, 8, 13 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Trajkovic in view of U.S. Patent Publication No. 2005/0248469 to DeKock *et al.* (“DeKock”). Claims 4, 8, 13, and 19 have been cancelled without prejudice or disclaimer, rendering their rejections moot.

Dependent Claims 15-16

On page 6 of the Office Action, Claims 15-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Trajkovic in view of U.S. Patent No. 6,985,827 to Williams (“Williams”). Applicants respectfully traverse the rejections.

Claims 15 and 16 depend from Claim 9. As explained above, Trajkovic fails to teach or suggest at least one element of Claim 9. Williams fails to teach or suggest the elements of Claim 9 not disclosed or suggested by Trajkovic. For example, Williams fails to teach or suggest “attempting to communicate the citation signal to a wireless device of a person associated with

Application No. 12/907,702

Confirmation No.: 2490

Filed: October 19, 2010

Attorney Docket No.: 1624-4CIP (CW-3)

the vehicle,” as in Claim 9. Williams describes capturing a license tag by video camera.

Williams, FIG. 1. Williams fails to teach or suggest “attempting to communicate the citation signal to a wireless device of a person associated with the vehicle,” as in Claim 9. Therefore, Trajkovic and Williams, whether considered individually or in combination, fail to teach or suggest at least one element of Claim 9, from which Claims 15 and 16 depend. Hence, Claims 15 and 16 are allowable, at least by virtue of their dependency from an allowable claim. Further, these claims recite additional limitations which, in conformity with the features of their corresponding independent claim, are not disclosed or suggested by the art of record. The dependent claims are therefore believed patentable. However, the individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

Dependent Claim 5

On page 6 of the Office Action, Claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Trajkovic and DeKock as applied to Claim 4 above, and further in view of Williams. Applicants respectfully traverse the remaining rejections.

Claim 5 depends from Claim 1, which as explained above is believed allowable over Trajkovic and DeKock. Hence, Claim 5 is allowable, at least by virtue of its dependency from an allowable claim. However, the individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

New Claims 21 and 22

New Claims 21 and 22 depend from Claims 1 and 9, respectively. Hence, Claims 21 and 22 are allowable, at least by virtue of their dependency from an allowable claim. Further, these claims recite additional elements not disclosed or suggested by the cited references. For

Application No. 12/907,702
Confirmation No.: 2490
Filed: October 19, 2010
Attorney Docket No.: 1624-4CIP (CW-3)

example, the cited references fail to disclose or suggest that an attempt is made to transmit the citation signal to a mobile phone of the person associated with the vehicle, as in Claim 21. As another example, the cited references fail to teach or suggest that an attempt is made to communicate the citation signal to an onboard navigation system of the vehicle, as in Claim 22. For at least these additional reasons, Claims 21 and 22 are allowable.

For all of the above reasons, the claim objections are believed to have been overcome placing the pending in condition for allowance, and reconsideration and allowance thereof is respectfully requested.

The Examiner is encouraged to telephone the undersigned to discuss any matter that would expedite allowance of the present application.

The Commissioner is hereby authorized to credit overpayments or charge payment of any additional fees associated with this communication to Deposit Account No. 502104.

Respectfully submitted,

Date: March 7, 2011

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Exhibit F

Application No. 12/907,702

Confirmation No.: 2490

Filed: October 19, 2010

Attorney Docket No.: 1624-4CIP (CW-3)

IN THE CLAIMS

Please amend Claims 1, 5, 9, 11, and 17 as indicated.

Please add new Claims 21 and 22 as indicated.

Please cancel Claims 4, 8, 10, 13, 18, and 19 without prejudice and without disclaimer of subject matter.

1. (Currently Amended) A method of infraction detection based on vehicle traffic flow data, the method comprising:

- acquiring first imagery of a plurality of vehicles at a first location at a first time;
- acquiring second imagery of a plurality of vehicles at a second location at a second time;
- identifying a first vehicle from the acquired first imagery and the acquired second imagery;
- determining a speed of the first vehicle; and
- generating a citation signal when the speed of the first vehicle exceeds a predetermined speed; and
- attempting to transmit the citation signal to a device of a person associated with the vehicle.

2. (Original) The method of Claim 1, wherein the citation signal is communicated to a law enforcement agency.

Application No. 12/907,702

Confirmation No.: 2490

Filed: October 19, 2010

Attorney Docket No.: 1624-4CIP (CW-3)

3. (Original) The method of Claim 2, wherein at least a portion of at least one of the acquired first and second imagery is communicated to the law enforcement agency.

4. (Cancelled).

5. (Currently Amended) The method of Claim [[4]] 1, wherein the citation signal includes a license tag of the first vehicle and a location of the vehicle.

6. (Original) The method of Claim 1, wherein the speed of the vehicle is determined based on a difference between the first time and the second time and a distance between the first location and the second location.

7. (Original) The method of Claim 6, wherein the citation signal includes a difference between the speed of the first vehicle and the predetermined speed.

8. (Cancelled).

9. (Currently Amended) An apparatus for determining a vehicle speeding infraction, the system comprising:

memory to store image data from a plurality of video capture devices spaced a known distance apart; and

a processor in communication with the memory, the processor;

Application No. 12/907,702

Confirmation No.: 2490

Filed: October 19, 2010

Attorney Docket No.: 1624-4CIP (CW-3)

recognizing a vehicle appearing in a first image captured by a first one of the plurality of video capture devices at a first time and appearing in a second image captured by a second one of the plurality of video capture devices at a second time;~~and~~

computing a speed of the recognized vehicle based on the first time, the second time, and the known distance;

generating a citation signal when the computed speed exceeds a predetermined speed; and

attempting to communicate the citation signal to a device of a person associated with the vehicle.

10. (Cancelled).

11. (Currently Amended) The apparatus of Claim [[10]] 9, wherein the citation signal includes the speed, location, and identity of the vehicle.

12. (Original) The apparatus of Claim 11, wherein the citation signal and the second image is transmitted to a law enforcement agency.

13. (Cancelled).

14. (Original) The apparatus of Claim 9, wherein recognizing the vehicle comprises: applying an image recognition algorithm to the first image to produce a first result;

Application No. 12/907,702

Confirmation No.: 2490

Filed: October 19, 2010

Attorney Docket No.: 1624-4CIP (CW-3)

applying the image recognition algorithm to the second image to produce a second result;
and
comparing the first and second results.

15. (Original) The apparatus of Claim 14, wherein the image recognition algorithm detects a make and model of the vehicle.

16. (Original) The apparatus of Claim 15, wherein the image recognition algorithm detects at least one of a license tag number of the vehicle, and a Vehicle Identification Number (VIN) of the vehicle

17. (Currently Amended) A system of determining a speeding violation by a vehicle, the system comprising:

a first image capture device at a first location, having a first processor to perform an image recognition algorithm to detect the vehicle in a first image captured by the first image capture device and to determine a first time at which the vehicle passes in proximity to the first location; and

a second image capture device at a second location having a second processor to perform an image recognition algorithm to detect the vehicle in a second image captured by the second image capture device and to determine a second time at which the vehicle passes in proximity to the second location; and

a third processor to:

Application No. 12/907,702

Confirmation No.: 2490

Filed: October 19, 2010

Attorney Docket No.: 1624-4CIP (CW-3)

compute a speed of the vehicle based on a known distance between the images captured by the first and second image capture devices and based on the first and second times;

generate a citation signal when the speed of the vehicle exceeds a predetermined speed; and

attempting to transmit the citation signal to a device of a person associated with the vehicle.

18. (Cancelled).

19. (Cancelled).

20. (Original) The system of Claim 17, further comprising a third processor to:
receive an image of the vehicle from at least one of the first and second processor;
compute a speed of the vehicle; and
communicate the image of the vehicle and the speed of the vehicle to a law enforcement officer.

21. (New) The method of Claim 1, wherein the device is a mobile phone of the person associated with the vehicle.

22. (New) The apparatus of Claim 9, wherein the device is an on board navigation system of the vehicle.

Exhibit G

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

CONTIGUITY, LLC,
Plaintiff

-vs-

CONDUENT BUSINESS SERVICES,
LLC,

Defendant

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W-23-CV-00038-XR

ORDER

On this date, the Court considered Defendant’s motion to dismiss Plaintiff’s first amended complaint (ECF No. 34), Plaintiff’s response (ECF No. 38), and Defendant’s reply (ECF No. 39). After careful consideration, the Court **GRANTS** Defendant’s motion.

BACKGROUND

Plaintiff Contiguity, LLC (“Contiguity”) is the assignee of all right, title, and interest in U.S. Patent No. 8,031,084 (the “’084 Patent” or the “asserted patent”) which was issued on October 4, 2011. ECF No. 31-1. The ’084 Patent is titled “method and system for infraction detection based on vehicle traffic flow data” and is used to monitor vehicle speeds. *Id.* The ’084 Patent allegedly solves the need for ticketing speeding motorists “without jeopardizing the safety of police and other motorists, and without requiring the presence of a police officer to actually witness the speeding.” ECF No. 31-1 at 2:15–18. The ’084 Patent provides a “method and system for detecting and reporting a speeding infraction by a vehicle.” *Id.* at 2:22–24. Specifically, the asserted patent’s first claim discloses a method of infraction detection performed by acquiring multiple images of a vehicle at different locations along a route, using those images to determine the speed of the vehicle, and generating a “citation signal” when the speed of the vehicle exceeds a predetermined

speed. *See id.* at 8:5–18. The “citation signal” may include a license tag of the vehicle and the location of the vehicle. *Id.* at 8:5–26.

On January 20, 2023, Contiguity filed suit alleging direct and induced infringement by Defendant Conduent Business Services, LLC (“Conduent”) of the ’084 Patent. ECF No. 31. Specifically, Contiguity contends that Conduent infringes claims 1¹ and 4² of the ’084 Patent (the “asserted claims”) by creating a similar system that uses video and radar to track, document, and report vehicles’ speed while traveling through an enforcement zone. ECF No. 31-2. On February 14, 2023, Conduent moved to dismiss Contiguity’s complaint. ECF No. 7. The Court subsequently granted Conduent’s motion to dismiss, holding Contiguity failed to allege infringement of any valid claims in the ’084 Patent but giving Contiguity leave to amend. ECF No. 27.

On June 9, 2023, Contiguity filed its first amended complaint (“FAC”), adding additional facts pulled from a declaration obtained from the ’084 Patent’s inventor but reasserting its same infringement theories. *See* ECF No. 31.³ Conduent again moves to dismiss under Rule 12(b)(6), advancing three primary arguments in support of its motion. ECF No. 34. First, Conduent again contends that the ’084 Patent’s claims fail the *Alice/Mayo* two step analysis and are thus invalid under 35 U.S.C. § 101. *Id.* at 1–9. Second, Conduent argues that Contiguity has not plausibly

¹ Claim 1 provides: A method of infraction detection based on vehicle traffic flow data, the method comprising:

acquiring first imagery of a plurality of vehicles at a first location at a first time;
acquiring second imagery of a plurality of vehicles at a second location at a second time;
identifying a first vehicle from the acquired first imagery and the acquired second imagery;
determining a speed of the first vehicle;
generating a citation signal when the speed of the first vehicle exceeds a predetermined speed; and
attempting to transmit the citation signal to a device of a person associated with the vehicle.

ECF No. 31-1 at 8:6–18.

² Claim 4 is dependent on claim 1 and reads: “The method of claim 1, wherein the citation signal includes a license tag of the first vehicle and a location of the vehicle.” ECF No. 31-1 at 8:24–26.

³ As it did in its original complaint, Contiguity again only identifies claims 1 and 4 in its FAC and claim chart. ECF Nos. 31, 31-2. No other claims are at issue.

alleged infringement of each limitation of at least one exemplary claim. *Id.* at 9–10. Third, Conduent argues that Contiguity has not properly alleged pre-suit knowledge of the '084 Patent sufficient to support any pre-suit indirect infringement claims. *Id.* at 10.

DISCUSSION

I. Legal Standard

a. *Moton to Dismiss*

In patent cases, issues that are unique to patent law are governed by Federal Circuit precedent. *See Woods v. DeAngelo Marine Exhaust Sys., Inc.*, 692 F.3d 1272, 1279 (Fed. Cir. 2012). But because motions to dismiss under Federal Rule of Civil Procedure 12(b)(6) raise purely procedural issues, courts apply the law of the regional circuit—here, the Fifth Circuit—when deciding whether such a motion should be granted. *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1347 (Fed. Cir. 2016).

Federal Rule of Civil Procedure 12(b)(6) allows a party to move for the dismissal of a complaint for “failure to state a claim upon which relief can be granted.” To survive a motion to dismiss, “a complaint must contain sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 678.

In considering a motion to dismiss under Rule 12(b)(6), all factual allegations from the complaint should be taken as true, and the facts are to be construed in the light most favorable to the nonmoving party. *Fernandez-Montes v. Allied Pilots Assoc.*, 987 F.2d 278, 284 (5th Cir. 1993). Still, a complaint must contain “more than labels and conclusions, and a formulaic recitation of

the elements of a cause of action will not do.” *Twombly*, 550 U.S. at 555. “[N]aked assertions’ devoid of ‘further factual enhancement,’” and “threadbare recitals of the elements of a cause of action, supported by mere conclusory statements,” are not entitled to the presumption of truth. *Iqbal*, 556 U.S. at 678 (quoting *Twombly*, 550 U.S. at 557); *see also R2 Invs. LDC v. Phillips*, 401 F.3d 638, 642 (5th Cir. 2005) (stating that the Court should neither “strain to find inferences favorable to plaintiffs” nor accept “conclusory allegations, unwarranted deductions, or legal conclusions.”).

II. Analysis

It is black-letter law that “[e]ach element contained in a patent claim is deemed material to defining the scope of the patented invention.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1997). Indeed, to plausibly allege direct infringement, a party must plausibly allege infringement of each element of at least one exemplary claim to survive a motion to dismiss. *UTTO Inc. v. Metrotech Corp.*, 646 F. Supp. 3d 1180, 1184 (N.D. Cal. 2022); *see also Aristocrat Techs. Australia Pty Ltd. v. Int’l Game Tech.*, 709 F.3d 1348, 1362 (Fed. Cir. 2013) (“To establish liability for direct infringement of a claimed method or process under 35 U.S.C. § 271(a), a patentee must prove that each and every step of the method or process was performed.”); *De La Vega v. Microsoft Corp.*, No. W-19-CV-00612-ADA, 2020 WL 3528411, at *6 (W.D. Tex. Feb. 11, 2020) (granting motion to dismiss where direct infringement allegations failed to allege an infringing product met each limitation of an asserted claim). Moreover, as Conduent contends, a plaintiff fails to plausibly state a cause of action where its theory of infringement rests on an implausible claim construction, *Ottah v. Fiat Chrysler*, 884 F.3d 1135, 1141–42 (Fed. Cir. 2018), or where “the factual allegations are actually inconsistent with and contradict infringement,” *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1354 (Fed. Cir. 2021).

Here, Contiguity fails to adequately plead Conduent’s allegedly infringing system practices both of the ’084 Patent’s “acquiring” limitations that require (1) “acquiring first imagery of a plurality of vehicles *at a first location* at a first time” and (2) “acquiring second imagery of a plurality of vehicles *at a second location* at a second time.” ECF No. 31-1 at 8:8–11 (emphasis added). In particular, Contiguity’s claim chart⁴ alleges that Conduent’s system uses only one camera to capture images of passing vehicles from a single location. *See* ECF No. 31-2 at 4. Yet, this allegation is simply inconsistent with infringement of the ’084 Patent as the two “acquiring” limitations require that the imagery be collected “at a first location” and then “at a second location.” ECF No. 31-1 at 8:8–11. This distinction is not a mere technicality.

A fundamental canon of claim construction requires that different terms are presumed to have different meanings. *SimpleAir, Inc. v. Sony Ericsson Mobile Commc’ns AB*, 820 F.3d 419, 431 (Fed. Cir. 2016). In effect, Contiguity’s theory of infringement asks that this Court construe “at a first location” and “at a second location” to refer to only one camera at one location. But this argument betrays the clear import of the ’084 Patent’s claims and specification. *See* ECF No. 31-1 at 7:1–11 (“FIG. 4 is a flow chart of an exemplary process for vehicle traffic speed violation detection and citation in accordance with the principles of the present invention. In block 405, a first image is acquired *at a first location* at a first time. At block 410, a second image is acquired *at a second location* at a second time. At block 415, an identity of a vehicle appearing in both the first and second images is acquired. The speed of the vehicle is determined at block 420. *The speed can be determined from the ratio of the distance between the first and second location and the difference between the first time and the second time.*” (emphasis added)); *see also id.* at 5:1–3, 8:27–30. Here, the only plausible construction is that “at a first location” and “at a second location”

⁴ Contiguity incorporated its claim chart by reference into its first amended complaint. ECF No. 31 ¶ 31.

refer to two cameras each at two different locations; however, Contiguity only plausibly alleges that Conduent's system captures images at one location with one camera. ECF No. 31-2 at 4. "Where, as here, the factual allegations are actually inconsistent with and contradict infringement, they are likewise insufficient to state a plausible claim." *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1354 (Fed. Cir. 2021).

Of course, Contiguity contends the Court should avoid prematurely ruling on an alleged claim construction issue at this stage, arguing it has sufficiently alleged infringement to survive a motion to dismiss. ECF No. 38 at 15 (citing *Nalco Co. v. Chem-Mod, LLC*, 883 F.3d 1337, 1350 (Fed. Cir. 2018)). However, Contiguity fails to identify any alternative plausible construction of the "acquiring" limitations in its briefing that might justify waiting for the benefit of claim construction. *Id.* at 14–15. Indeed, the Court cannot ignore that Contiguity's allegations of infringement rely on an impermissible construction of the '084 Patent's claims to which Contiguity has no meaningful response. *See ALD Soc., LLC v. Verkada, Inc.*, 654 F. Supp. 3d 972, 979–81 (N.D. Cal. 2023) (granting motion to dismiss where a plaintiff alleged "an implausible construction . . . or a potentially plausible construction . . . inconsistent with infringement").

In sum, Contiguity's allegations refute its claims of infringement, plausibly alleging only that Conduent's allegedly infringing system uses only one camera at a single location to capture images of passing vehicles. *See* ECF No. 31-2 at 4.⁵ Contiguity pleads itself out of court, alleging a direct infringement theory that is incompatible with any plausible construction of the asserted claims.⁶

⁵ In addition, it appears undisputed that the doctrine of equivalents would not save Contiguity's claims. *See* ECF No. 34 at 19; ECF No. 38 at 14–15.

⁶ Though the Court previously dismissed Contiguity's complaint on 35 U.S.C. § 101 invalidity grounds, ECF No. 27, Contiguity's failure to adequately plead infringement of the '084 Patent is an independently sufficient ground for dismissal. As such, the Court will forgo belaboring the § 101 issue again.

In addition, given the necessary dependence of Contiguity's induced infringement theory on its direct infringement theory, it follows that Contiguity has failed to plausibly allege induced infringement. *See In re Bill of Lading Transmission & Processing Sys. Pat. Litig.*, 681 F.3d 1323, 1339 (Fed. Cir. 2012) ("It is axiomatic that '[t]here can be no inducement or contributory infringement without an underlying act of direct infringement.'" (quoting *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1326 (Fed.Cir.2004) (alteration in original))).

Though Contiguity requests that any dismissal be without prejudice, the Court has already granted Contiguity leave to amend once, and Contiguity has identified no facts that might cure its pleading deficiencies. *See* ECF No. 38 at 15. Tellingly, Contiguity's amended complaint made no changes to address this same infringement issue previously identified by Conduent. *Compare* ECF No. 1 *and* ECF No. 7 at 14–20 *with* ECF No. 31 *and* ECF No. 34 at 15–19. Thus, the Court's dismissal will be with prejudice. *See Sinclair v. Petco Animal Supplies Stores, Inc.*, 581 F. App'x 369, 371 (5th Cir. 2014).

CONCLUSION

For the foregoing reasons, Defendant Conduent's motion to dismiss is **GRANTED**. As it appears that Plaintiff Contiguity can plead no additional facts to sufficiently allege infringement of the '084 Patent, the Court will deny Plaintiff Contiguity leave to amend. Plaintiff Contiguity's first amended complaint is **DISMISSED WITH PREJUDICE**. A final judgment will issue separately pursuant to Rule 58.

It is so **ORDERED**.

SIGNED this 22nd day of January, 2024.

A handwritten signature in blue ink, consisting of a large loop and a trailing flourish, positioned above a horizontal line.

XAVIER RODRIGUEZ
UNITED STATES DISTRICT JUDGE

Exhibit H

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

CONTIGUITY LLC,

Plaintiff,

v.

HIKVISION USA, INC.,

Defendant.

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Civil Action No. 3:23-CV-00160-N

ORDER

This Order addresses Defendant Hikvision USA, Inc.’s (“Hikvision”) motion to dismiss [20]. Because Plaintiff Contiguity LLC (“Contiguity”) has not adequately pled a claim for relief against Hikvision, the Court grants the motion.

I. THE PATENT INFRINGEMENT DISPUTE

This motion arises from a patent dispute between Contiguity and Hikvision. Contiguity is the record owner of the United State Patent No. 8,031,084 (the “’084 Patent”). Pl.’s First Am. Compl. ¶ 9 [18]. The ’084 Patent covers, among other things, a “[m]ethod of infraction detection based on vehicle traffic flow data,” comprising several claim limitations, including “determining a speed of the first vehicle;” “generating a citation signal when the speed of the first vehicle exceeds a predetermined speed;” and “attempting to transmit the citation signal to a device of a person associated with the vehicle.” Pl.’s First Am. Compl., Ex. A, 11 [18-1]. Contiguity brings claims against Hikvision for direct and indirect infringement of the ’084 Patent. Hikvision moves to dismiss Contiguity’s

claims on the grounds that the patent is invalid under 35 U.S.C. § 101, and Contiguity fails to state a claim for infringement under Federal Rule of Civil Procedure 12(b)(6).

II. RULE 12(B)(6) STANDARD

When deciding a Rule 12(b)(6) motion to dismiss, a court must determine whether the plaintiff has asserted a legally sufficient claim for relief. *Blackburn v. City of Marshall*, 42 F.3d 925, 931 (5th Cir. 1995). A viable complaint must include “enough facts to state a claim to relief that is plausible on its face.” *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 570 (2007). To meet this “facial plausibility” standard, a plaintiff must “plead[] factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). A court generally accepts well-pleaded facts as true and construes the complaint in the light most favorable to the plaintiff. *Gines v. D.R. Horton, Inc.*, 699 F.3d 812, 816 (5th Cir. 2012). But a plaintiff must provide “more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do.” *Twombly*, 550 U.S. at 555 (internal citations omitted). “Factual allegations must be enough to raise a right to relief above the speculative level ... on the assumption that all the allegations in the complaint are true (even if doubtful in fact).” *Id.* (internal citations omitted).

In ruling on a Rule 12(b)(6) motion, a court generally limits its review to the face of the pleadings, accepting as true all well-pleaded facts and viewing them in the light most favorable to the plaintiff. *See Spivey v. Robertson*, 197 F.3d 772, 774 (5th Cir. 1999). However, a court may also consider documents outside of the pleadings if they fall within certain limited categories. First, “[a] court is permitted . . . to rely on ‘documents

ORDER – PAGE 2

incorporated into the complaint by reference, and matters of which a court may take judicial notice.” *Dorsey v. Portfolio Equities, Inc.*, 540 F.3d 333, 338 (5th Cir. 2008) (quoting *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 322 (2007)). Second, “[a] written document that is attached to a complaint as an exhibit is considered part of the complaint and may be considered in a 12(b)(6) dismissal proceeding.” *Ferrer v. Chevron Corp.*, 484 F.3d 776, 780 (5th Cir. 2007). Third, a “court may consider documents attached to a motion to dismiss that ‘are referred to in the plaintiff’s complaint and are central to the plaintiff’s claim.’” *Sullivan v. Leor Energy, LLC*, 600 F.3d 542, 546 (5th Cir. 2010) (quoting *Scanlan v. Tex. A & M Univ.*, 343 F.3d 533, 536 (5th Cir. 2003)). Finally, “[i]n deciding a 12(b)(6) motion to dismiss, a court may permissibly refer to matters of public record.” *Cinel v. Connick*, 15 F.3d 1338, 1343 n.6 (5th Cir. 1994) (citation omitted); *see also, e.g., Funk*, 631 F.3d at 783 (stating, in upholding district court’s dismissal pursuant to Rule 12(b)(6), that “[t]he district court took appropriate judicial notice of publicly-available documents and transcripts produced by the [Food and Drug Administration], which were matters of public record directly relevant to the issue at hand”).

III. THE COURT GRANTS THE MOTION TO DISMISS

“[D]irect infringement requires a single party to perform every step of a claim method.” *Aristocrat Techs. Australia Pty. Ltd. v. Int’l Game Tech.*, 709 F.3d 1348, 1353 (Fed. Cir. 2013). For a patent infringement claim to survive a motion to dismiss, the complaint must include “factual allegations that, when taken as true, articulate why it is plausible that the accused product infringes the patent claim.” *Bot M8 LLC v. Sony Corp.*

of Am., 4 F.4th 1342, 1353 (Fed. Cir. 2021). The Court determines that Contiguity has not pled enough factual allegations to state a claim for infringement. Because this is an independently sufficient ground for dismissal, the Court declines to address the '084 Patent's validity under 35 U.S.C. § 101.

Hikvision asserts, and Contiguity does not contest, that the Claim 1 limitation “attempting to transmit the citation signal to a device of a person associated with the vehicle” is material to the '084 Patent.¹ Def.'s Mot. to Dismiss at 16–18; Def.'s Reply 7–8 [36]; *see also* Pl.'s First Am. Compl. ¶ 18–19. However, Contiguity's claim chart, incorporated into its First Amended Complaint by reference, states only that the accused Hikvision product transmits citation signals to police or law enforcement. Pl.'s First Am. Compl., Ex. 2, 10, 12-13 [18-2]. Conspicuously absent is any allegation that the accused Hikvision products at any time transmit or attempt to transmit a citation signal to the person associated with the vehicle, as required by the '084 Patent claim limitations.

Contiguity argues that its assertions that Hikvision's products “first” transmit a signal to the police does not exclude the possibility that the products also transmit a signal to the person with the vehicle. Pl.'s Resp. in Opp. 16 [31]. While that proposition is true, it does not save Contiguity's complaint. Contiguity bears the burden of pleading facts sufficient to state a claim for relief. Contiguity has twice failed to plead facts alleging that the accused Hikvision product practices this material Claim 1 limitation. Similarly,

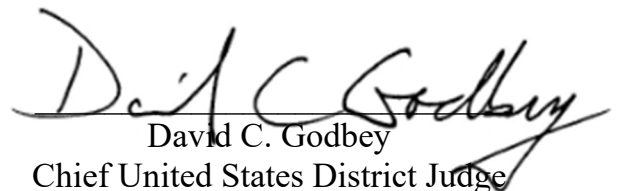
¹ The Court takes judicial notice of the '084 Patent prosecution history as referenced in Plaintiff's First Amended Complaint [18], *see Dorsey*, 540 F.3d at 338, and as a matter of public record. *See Funk*, 631 F.3d at 783.

Contiguity has not pled any facts plausibly alleging that Hikvision “specifically intended their customers to infringe the [] patent and knew that the customer's acts constituted infringement,” as required to state an induced infringement claim. *In re Bill of Lading Transmission & Processing Sys. Patent Litig.*, 681 F.3d 1323, 1339 (Fed. Cir. 2012). Contiguity fails to allege facts supporting either theory of infringement. Accordingly, the Court grants the motion to dismiss.

CONCLUSION

Because Contiguity has not alleged facts sufficient to state a claim for patent infringement, the Court grants Hikvision’s motion to dismiss. Contiguity has had two opportunities to plead facts sufficient to state a claim for relief under Rule 12(b)(6), first in its Original Complaint, and again in its First Amended Complaint. Because Contiguity has twice failed to plead facts sufficient to state a claim, the Court denies leave to file a third complaint, and will by separate judgment, dismiss Contiguity’s claims against Hikvision with prejudice.

Signed December 19, 2023.


David C. Godbey
Chief United States District Judge